FIG. 1

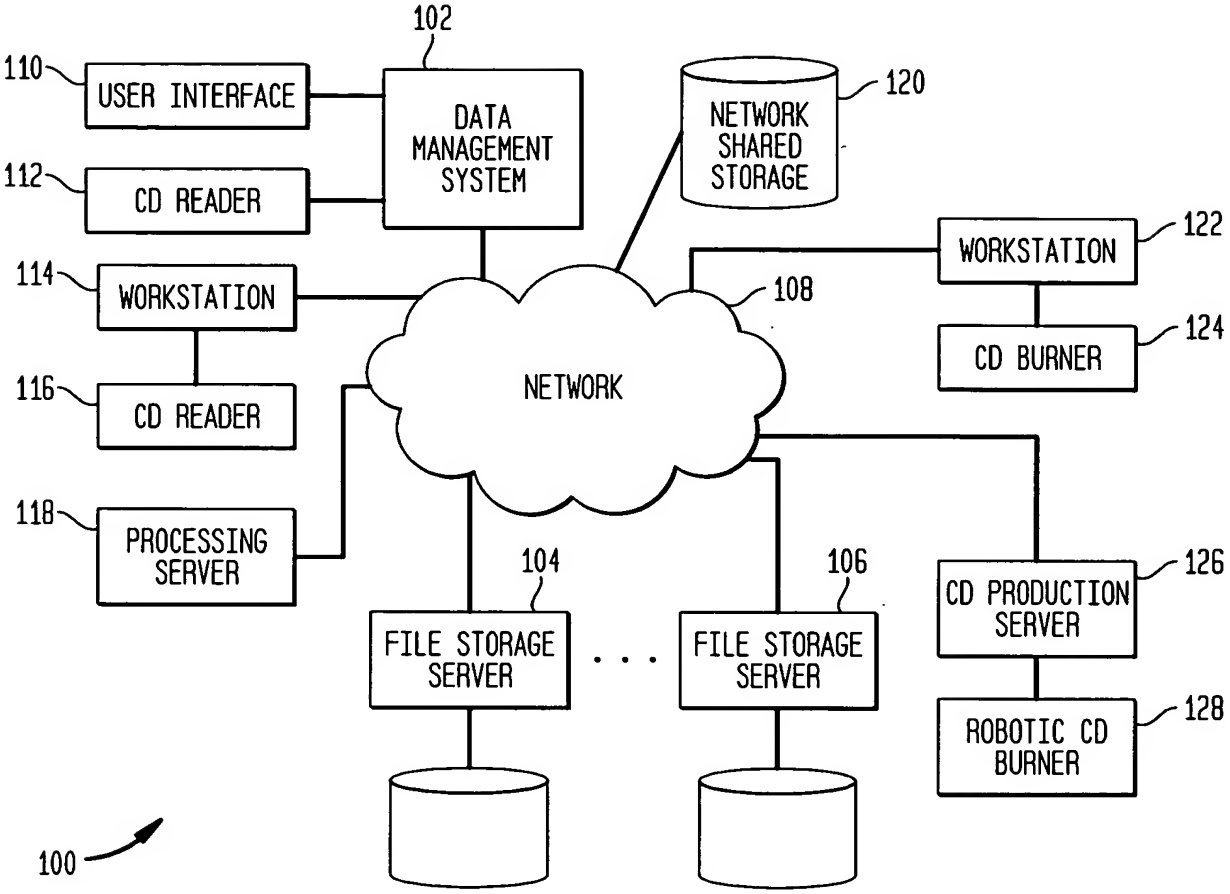

102
110
USER INTERFACE
DATA MANAGEMENT SYSTEM
120
NETWORK SHARED STORAGE
112
CD READER
122
WORKSTATION
114
WORKSTATION
108
NETWORK
124
CD BURNER
116
CD READER
118
PROCESSING SERVER
104
106
126
CD PRODUCTION SERVER
FILE STORAGE SERVER
FILE STORAGE SERVER
128
ROBOTIC CD BURNER
100

FIG. 2

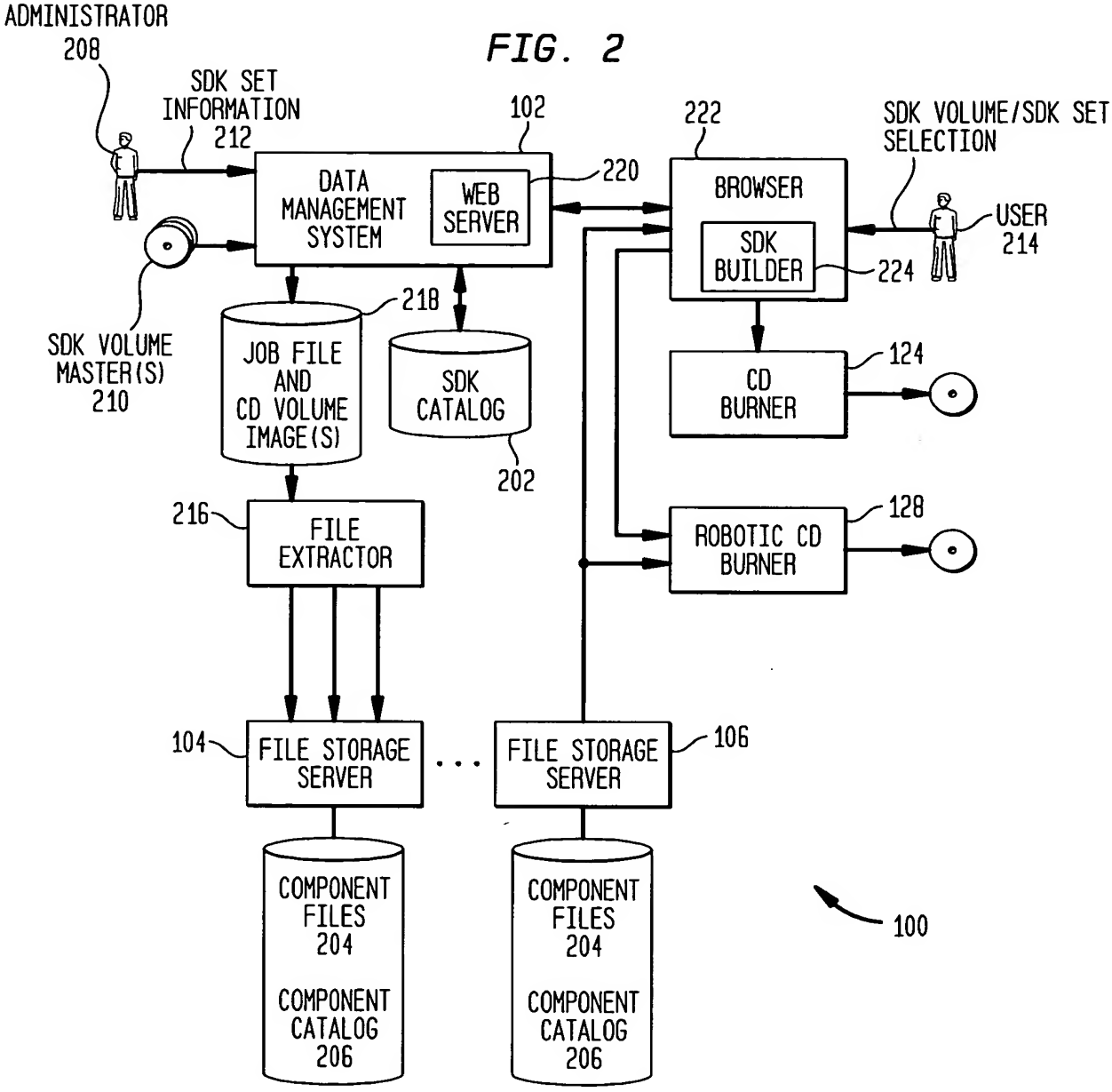

ADMINISTRATOR
208
SDK SET
INFORMATION
212
102
222
SDK VOLUME/SDK SET
SELECTION
DATA
MANAGEMENT
SYSTEM
WEB
SERVER
220
BROWSER
SDK
BUILDER
224
USER
214
SDK VOLUME
MASTER(S)
210
218
JOB FILE
AND
CD VOLUME
IMAGE(S)
SDK
CATALOG
202
CD
BURNER
124
216
FILE
EXTRACTOR
ROBOTIC CD
BURNER
128
104
FILE STORAGE
SERVER
FILE STORAGE
SERVER
106
COMPONENT
FILES
204
COMPONENT
CATALOG
206
COMPONENT
FILES
204
COMPONENT
CATALOG
206
100

FIG. 3

DATABASE OVERVIEW

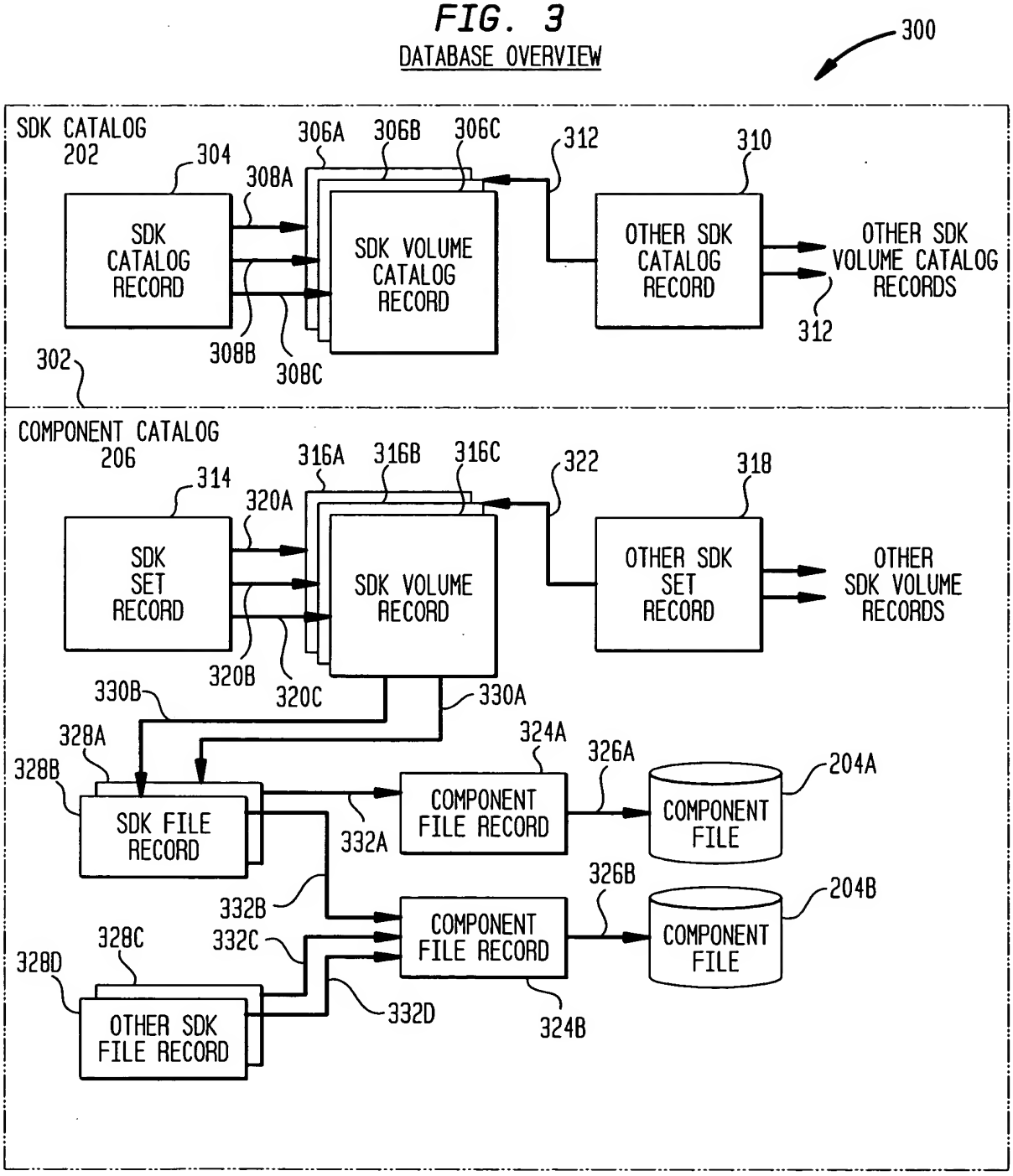


FIG. 4

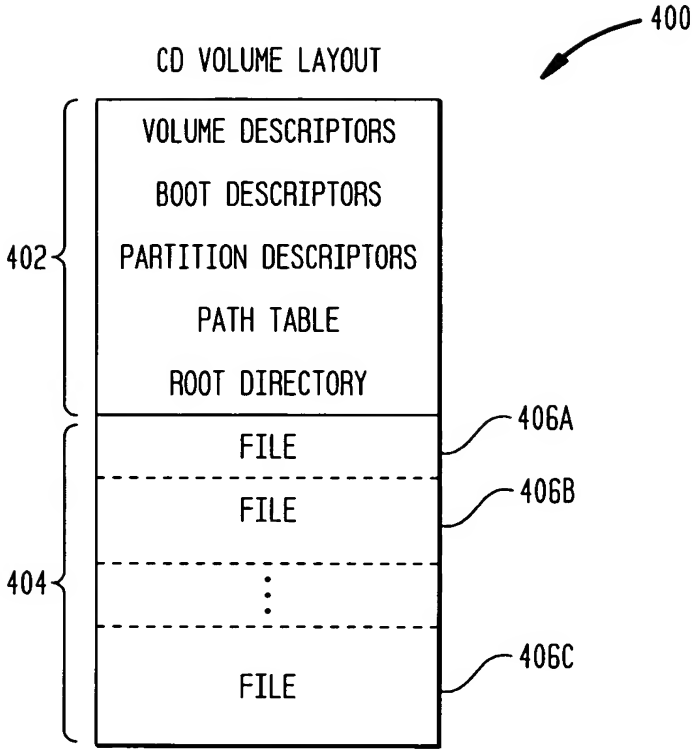

400
CD VOLUME LAYOUT
VOLUME DESCRIPTORS
BOOT DESCRIPTORS
PARTITION DESCRIPTORS
PATH TABLE
ROOT DIRECTORY
402
FILE
406A
FILE
406B
404
FILE
406C

FIG. 5

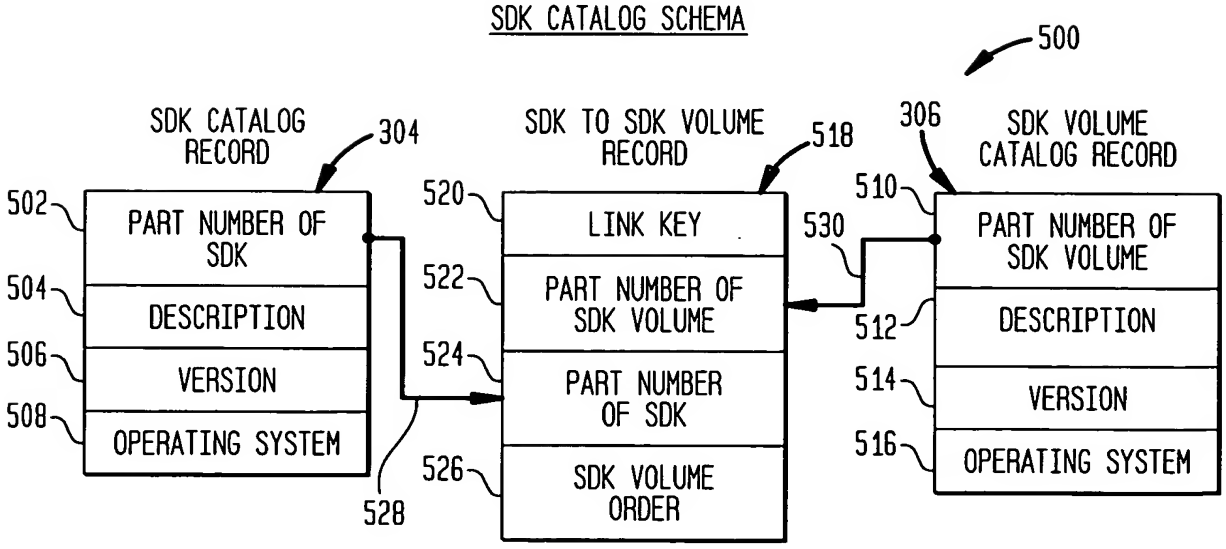

SDK CATALOG SCHEMA
500
SDK CATALOG RECORD
304
502
PART NUMBER OF SDK
504
DESCRIPTION
506
VERSION
508
OPERATING SYSTEM
528
SDK TO SDK VOLUME RECORD
518
520
LINK KEY
522
PART NUMBER OF SDK VOLUME
524
PART NUMBER OF SDK
526
SDK VOLUME ORDER
306
SDK VOLUME CATALOG RECORD
510
PART NUMBER OF SDK VOLUME
530
512
DESCRIPTION
514
VERSION
516
OPERATING SYSTEM

FIG. 6

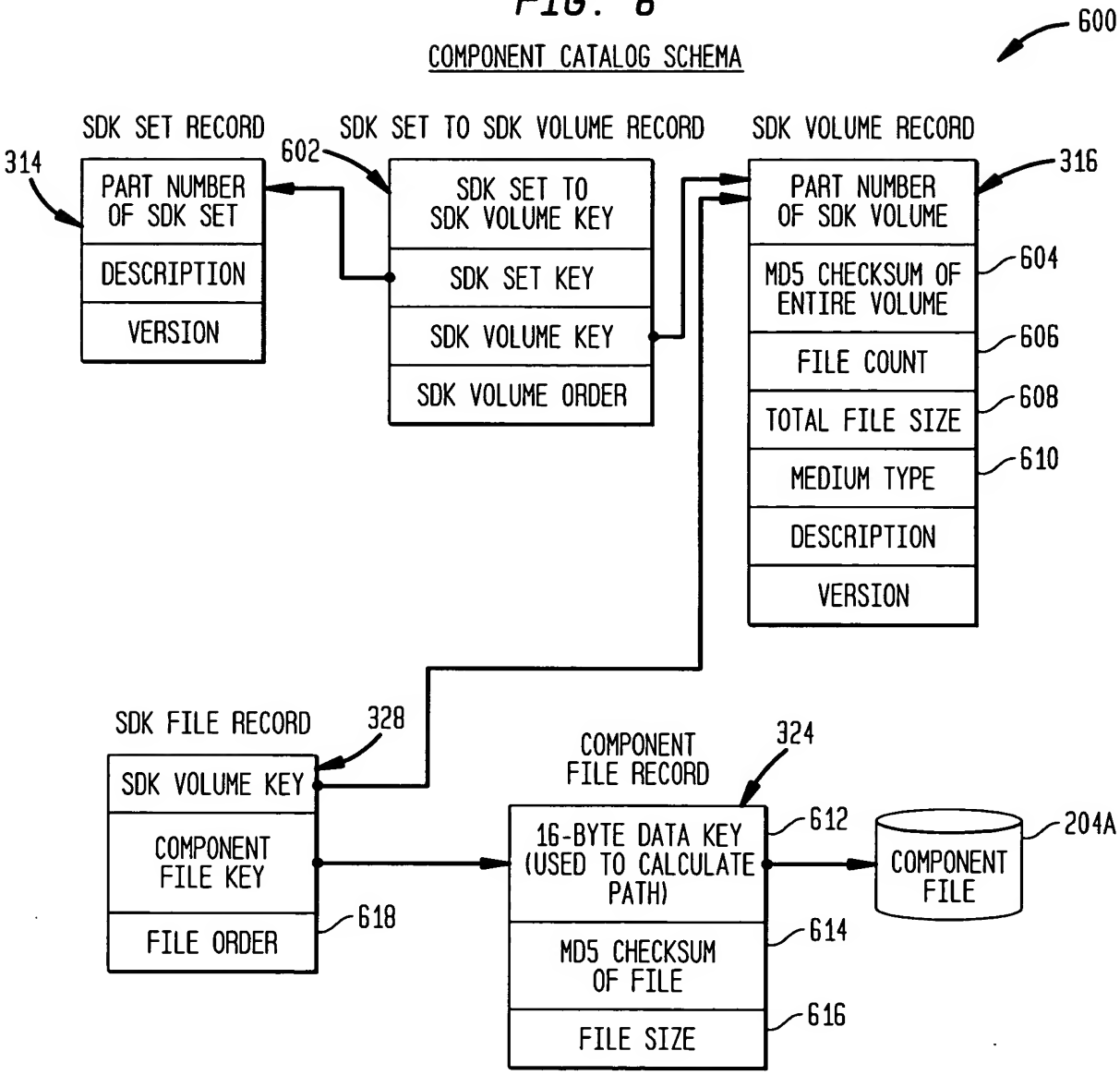

600
COMPONENT CATALOG SCHEMA
SDK SET RECORD
314
PART NUMBER OF SDK SET
DESCRIPTION
VERSION
602
SDK SET TO SDK VOLUME RECORD
SDK SET TO SDK VOLUME KEY
SDK SET KEY
SDK VOLUME KEY
SDK VOLUME ORDER
SDK VOLUME RECORD
316
PART NUMBER OF SDK VOLUME
604
MD5 CHECKSUM OF ENTIRE VOLUME
606
FILE COUNT
608
TOTAL FILE SIZE
610
MEDIUM TYPE
DESCRIPTION
VERSION
SDK FILE RECORD
328
SDK VOLUME KEY
COMPONENT FILE KEY
FILE ORDER
618
COMPONENT FILE RECORD
324
16-BYTE DATA KEY (USED TO CALCULATE PATH)
612
MD5 CHECKSUM OF FILE
614
FILE SIZE
616
COMPONENT FILE
204A

FIG. 7

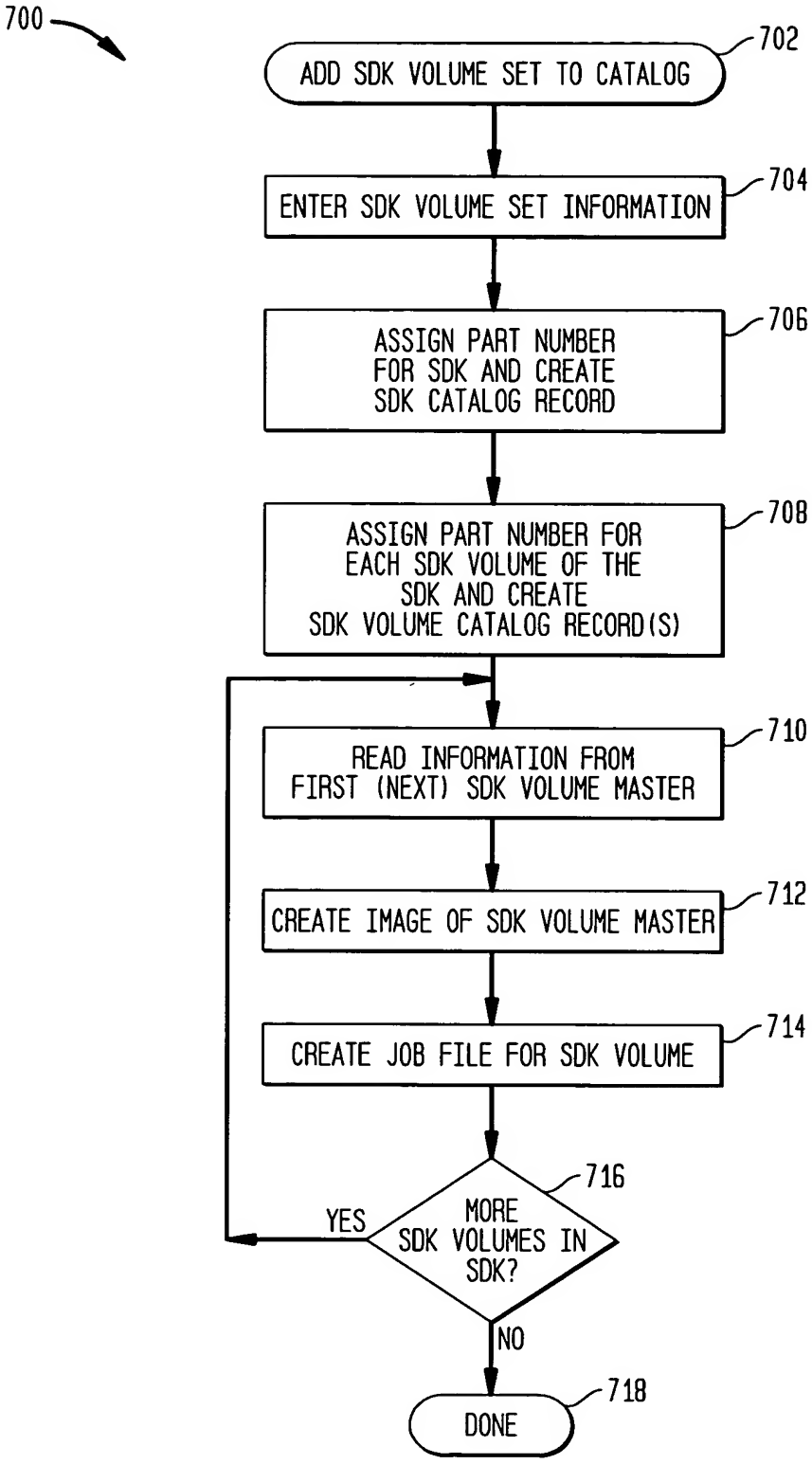
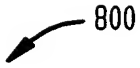

700
ADD SDK VOLUME SET TO CATALOG
702
ENTER SDK VOLUME SET INFORMATION
704
ASSIGN PART NUMBER FOR SDK AND CREATE SDK CATALOG RECORD
706
ASSIGN PART NUMBER FOR EACH SDK VOLUME OF THE SDK AND CREATE SDK VOLUME CATALOG RECORD(S)
708
READ INFORMATION FROM FIRST (NEXT) SDK VOLUME MASTER
710
CREATE IMAGE OF SDK VOLUME MASTER
712
CREATE JOB FILE FOR SDK VOLUME
714
MORE SDK VOLUMES IN SDK?
716
YES
NO
DONE
718

FIG. 8



JOB FILE

SDK VOLUME PART NUMBER
SDK VOLUME DESCRIPTION
SDK VOLUME VERSION
SDK PART NUMBER
SDK DESCRIPTION
SDK VERSION
PATH TO SDK VOLUME IMAGE OR TO SDK VOLUME MASTER

FIG. 9A

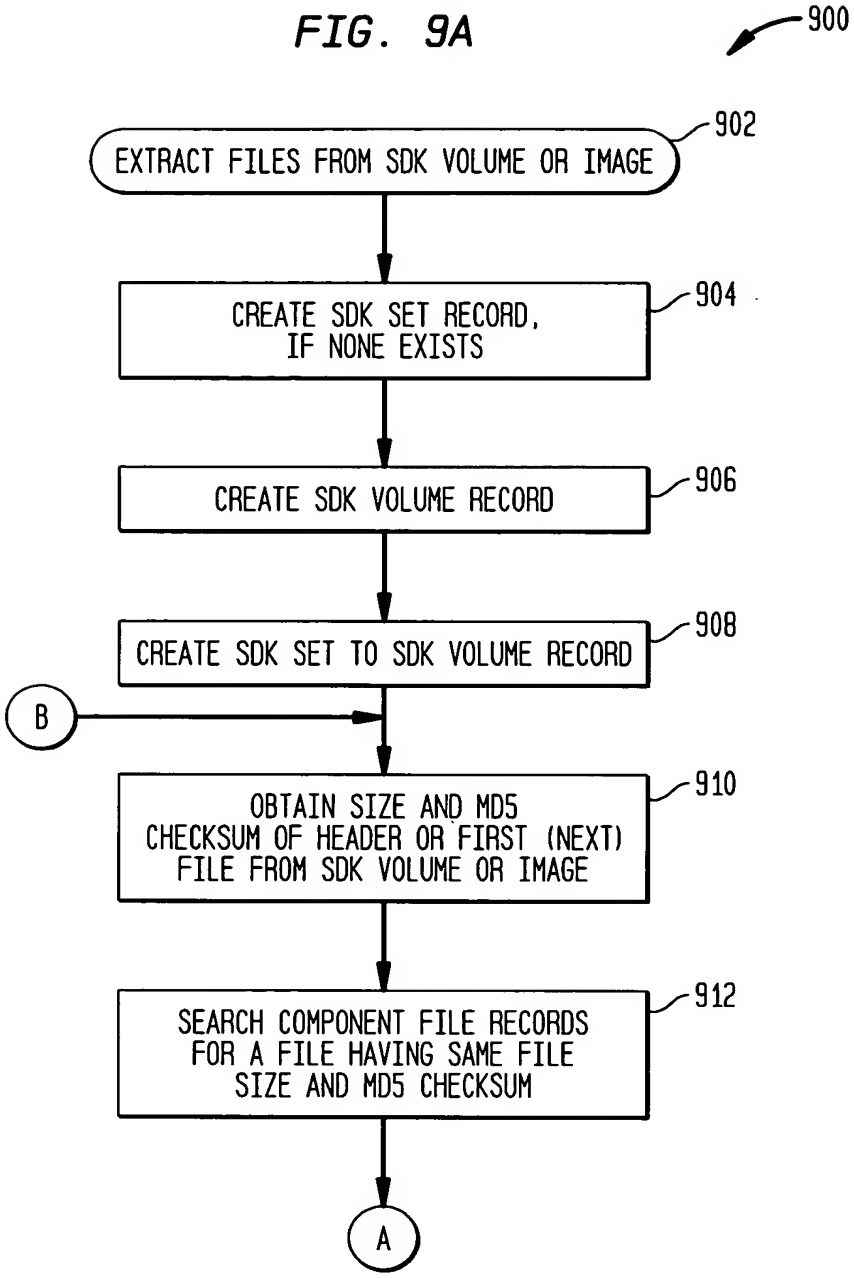
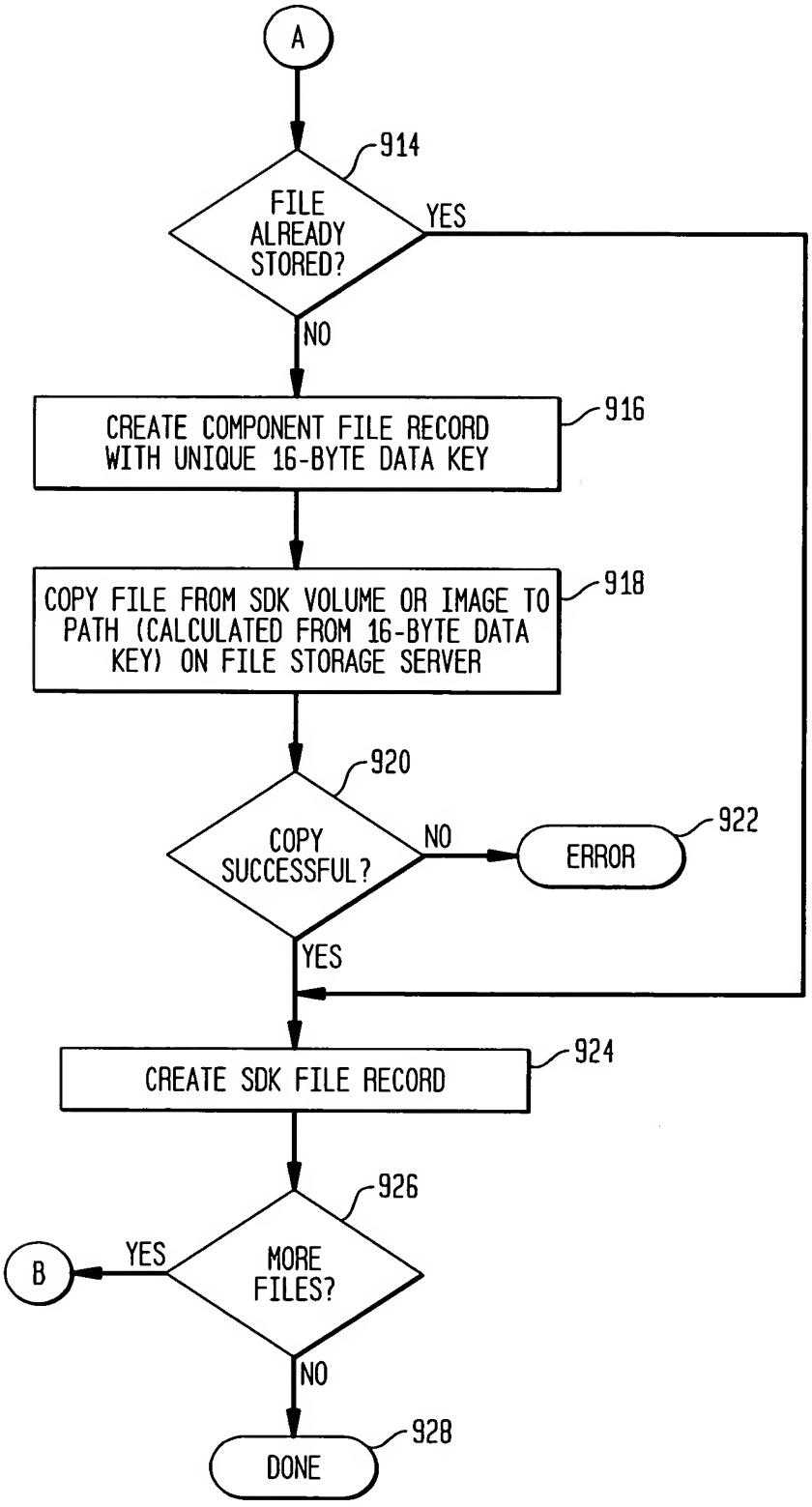

900
902
EXTRACT FILES FROM SDK VOLUME OR IMAGE
904
CREATE SDK SET RECORD, IF NONE EXISTS
906
CREATE SDK VOLUME RECORD
908
CREATE SDK SET TO SDK VOLUME RECORD
B
910
OBTAIN SIZE AND MD5 CHECKSUM OF HEADER OR FIRST (NEXT) FILE FROM SDK VOLUME OR IMAGE
912
SEARCH COMPONENT FILE RECORDS FOR A FILE HAVING SAME FILE SIZE AND MD5 CHECKSUM
A

FIG. 9B


A
914
FILE ALREADY STORED?
YES
NO
916
CREATE COMPONENT FILE RECORD WITH UNIQUE 16-BYTE DATA KEY
918
COPY FILE FROM SDK VOLUME OR IMAGE TO PATH (CALCULATED FROM 16-BYTE DATA KEY) ON FILE STORAGE SERVER
920
COPY SUCCESSFUL?
NO
922
ERROR
YES
924
CREATE SDK FILE RECORD
926
MORE FILES?
YES
B
NO
928
DONE

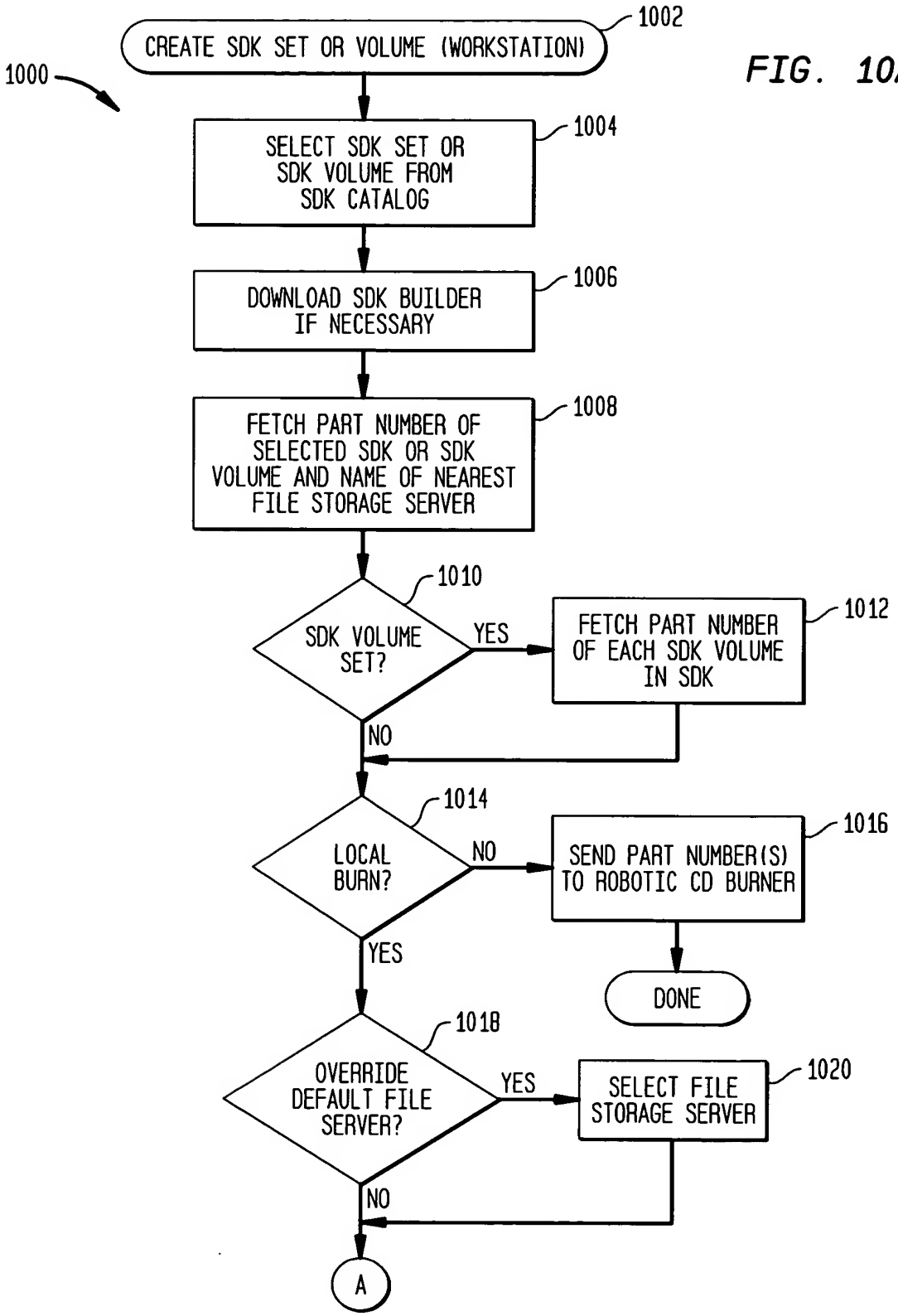

1000
CREATE SDK SET OR VOLUME (WORKSTATION)
1002
SELECT SDK SET OR SDK VOLUME FROM SDK CATALOG
1004
DOWNLOAD SDK BUILDER IF NECESSARY
1006
FETCH PART NUMBER OF SELECTED SDK OR SDK VOLUME AND NAME OF NEAREST FILE STORAGE SERVER
1008
SDK VOLUME SET?
1010
YES
FETCH PART NUMBER OF EACH SDK VOLUME IN SDK
1012
NO
LOCAL BURN?
1014
NO
SEND PART NUMBER(S) TO ROBOTIC CD BURNER
1016
YES
DONE
OVERRIDE DEFAULT FILE SERVER?
1018
YES
SELECT FILE STORAGE SERVER
1020
NO
A

FIG. 10A

FIG. 10B

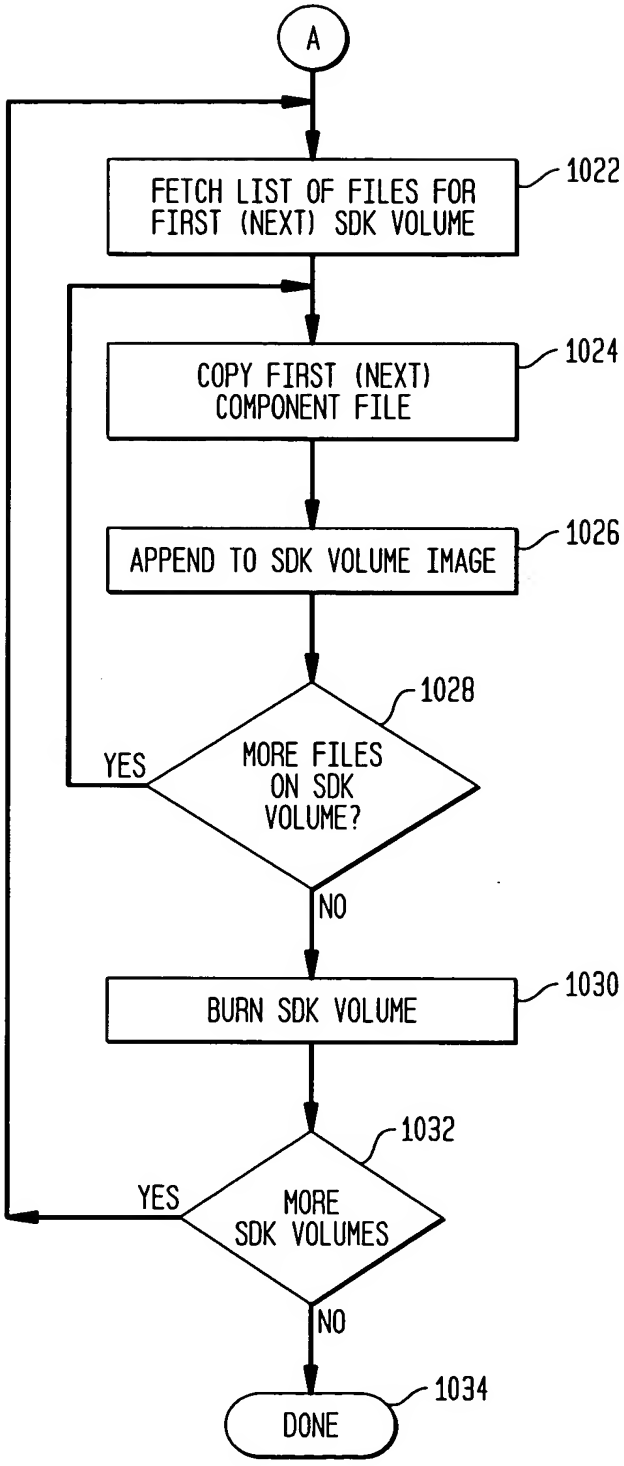
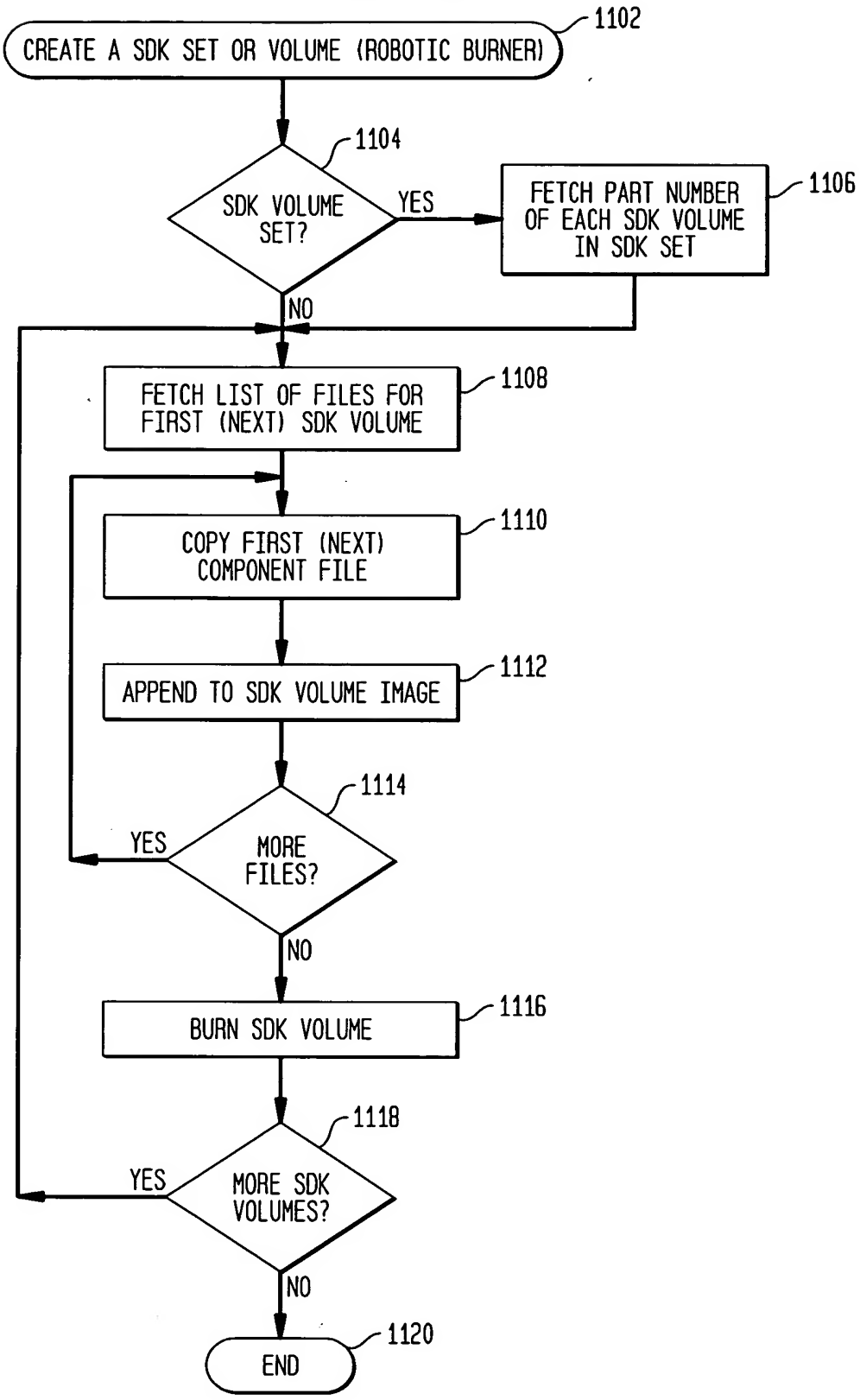

A
FETCH LIST OF FILES FOR FIRST (NEXT) SDK VOLUME
1022
COPY FIRST (NEXT) COMPONENT FILE
1024
APPEND TO SDK VOLUME IMAGE
1026
MORE FILES ON SDK VOLUME?
1028
YES
NO
BURN SDK VOLUME
1030
MORE SDK VOLUMES
1032
YES
NO
DONE
1034

FIG. 11


CREATE A SDK SET OR VOLUME (ROBOTIC BURNER)
1102
SDK VOLUME SET?
1104
YES
FETCH PART NUMBER OF EACH SDK VOLUME IN SDK SET
1106
NO
FETCH LIST OF FILES FOR FIRST (NEXT) SDK VOLUME
1108
COPY FIRST (NEXT) COMPONENT FILE
1110
APPEND TO SDK VOLUME IMAGE
1112
MORE FILES?
1114
YES
NO
BURN SDK VOLUME
1116
MORE SDK VOLUMES?
1118
YES
NO
END
1120